STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

## **CONTRACT CHANGE ORDER MEMORANDUM**

TO: Tony Anzia	ıno, Progr	am Manager /			FILE:	E.A.	04 - 0120F4		
						E-PM	SF-80-13.2/13.9		
FROM: Darryl Schram, Senior TE						). NO.	No		
5 977									
CCO#: 379	SUPPL	EMENT#: 0	Categor	y Code: CHPK	CONTINGENCY BALANCE (incl. this change)			nge) <b>\$27,545,579.86</b>	
COST: \$1,947,199.00 INCREASE ☑ DECREASE □						HEADQUARTERS APPROVAL REQUIRED? ✓ YES ☐ NO			
SUPPLEMENTAL FUNDS PROVIDED: \$0.00						IS THIS REQUEST IN ACCORDANCE WITH    ✓ YES    NO ENVIRONMENTAL DOCUMENTS?			
CCO DESCRIPTION:						PROJECT DESCRIPTION:			
Traveler Rall Gap Modifications						CONSTRUCT SELF-ANCHORED SUSPENSION BRIDGE			
Original Contract Time:		Time Adj. This Ch	This Change: Previously Approved C Time Adjustments:		со		ntage Time Adjusted: ing this change)	Total # of Unreconciled Deferred Time CCO(s): (including this change)	
2490	Day(s)	0	Day(s)	<b>630</b> Da	ıy(s)		25 %	2	

DATE: 8/27/2014

Page 1 of 2

## THIS CHANGE ORDER PROVIDES FOR:

- •Modify SAS traveler rails to meet the revised segment gap tolerance of between 10 mm and 30 mm. Modify E2/E3 traveler rails to maintain a segment gap tolerance between 5 mm and 15 mm. Sixty locations on the SAS traveler rails and eleven locations on the E2/E3 traveler rails have been identified as not meeting gap tolerance requirements listed above and will require modification.
- •Increase, as necessary, the slotted holes, located in the web of the traveler rail at the fixed connection, to a maximum of 18 x 55 mm. Also increase, as necessary, the slotted holes, located in the top flange of the traveler rail at the fixed connection, to a maximum of 24 x 60 mm. These modifications shall only be applied to traveler rails where needed in order to facilitate installation to the specified gap tolerance.
- •Modifications on the traveler rails shall be performed Mondays through Saturdays 10 hrs/day and Sundays 8hrs/day for the duration of Contract Change Order (CCO) 379 work. Compensation is included for all labor costs including straight time, overtime, and double time. Compensation is included for extended equipment operation and other inefficiencies that are necessary to support the extended work schedule.

Contract Plan Sheets No. 1120 "Traveler Rail Details No. 2" required a sliding rail segment gap tolerance between 14 mm and 18 mm for the SAS traveler and No. 1153 "E2/E3 Bikepath Traveler Rails -01" required a sliding rail segment gap tolerance for the E2/E3 bikepath traveler between 6.5 mm and 13.5 mm. The Contractor through RFI 2008R1 requested to increase the gap tolerance to provide for a larger fabrication and installation tolerance. This change was included in CCO 168 S0 "Traveler Rail Gap Variation" which increased segment gap tolerance for the SAS and Skyway traveler to between 10 mm and 22 mm and the E2/E3 bikepath traveler to between 5 mm and 15 mm. CCO 168 S1 was issued for \$350,000 for minor grinding of the traveler rail segment and support edges to achieve the gap tolerances required by CCO 168 S0. However, gap adjustment work is more extensive than anticipated and has yet to be performed due to the re-sequencing of work per CCO 160 "Seismic Safety Opening." The work to adjust traveler rail gaps will now be performed under this change order and CCO 168 S1 work scope will be revised.

After further review, it was determined that a gap tolerance for the SAS traveler rail segments could be increased to between 10 mm and 30 mm, while still providing for proper in service operation of the travelers. Therefore, this change order will adjust SAS traveler rail segments to meet the minimum 10 mm gap and extend the rail bottom flanges to meet the maximum 30 mm gap. This change order will also adjust the E2/E3 traveler rail segment to meet the minimum 5 mm gap and maximum 15 mm gap.

This change order provides compensation for the post readiness for Seismic Safety Opening (SSO) installation of the traveler rail sections provided for in CCO 160 "Seismic Safety Opening", Section 4 "Post 'Readiness for Seismic Safety Opening' Work". CCO 160 revised the order of work in order to achieve SSO by August 28, 2014. CCO 160 provided for the minimum amount of work necessary to safely open the SAS to live traffic. Installation of the traveler rails was not required for SSO; therefore this activity was re-sequenced in order to concentrate resources on work necessary to be completed before SSO. Fabrication and installation of the traveler rails was allowed to be completed on a schedule separate from the work required for SSO. Due to this re-sequencing, the time frames associated with the fabrication of the Orthotropic Box Girder (OBG) deck sections and the traveler rail sections did not allow for fit up of the traveler rails to the OBG deck sections at the fabrication facility. Therefore traveler rail fit up was deferred until field installation. This change order provides compensation, in accordance with CCO 160 provisions, to resequence traveler rail installation activities, perform field fit up, and adjust traveler rail segments to achieve tolerance requirements. The cost to repair damaged painted surfaces as a result

## **CONTRACT CHANGE ORDER MEMORANDUM**

EA: 0120F4 CCO: 379 - 0

DATE: 8/27/2014

Page 2 of 2

of this change will be included in CCO 168S1. Caulking of gaps between rail top flange and L102 as shown on plan sheet 1120R6 will not be performed under this change order, this work will be included in CCO 168 S2.

CCO 387 "Traveler Rail Gap Load Test" performed a fully loaded test on the traveler to verify that it can operate properly over 30 mm traveler segment gaps. CCO 387 testing and CCO 379 modifications of the traveler rails are on the critical path to project completion. In order to complete the project by the December 31, 2014 date imposed under CCO 386 "Time Related Overhead Post 8-24-14," work on this change order will be performed with extended and extra shifts.

The scope and cost of this work to adjust 42 traveler rail locations was negotiated and agreed to at a May 15, 2014 meeting of the Toll Bridge Project Oversight Committee (TBPOC) and the American Bridge/Fluor, a Joint Venture (ABFJV) principals. At the June 4, 2014 executive session of the TBPOC meeting the Department was directed to proceed with this change order for a negotiated lump sum of \$1,700,000 as agreed to on May 15th. Subsequent to the May 15th meeting the scope of work was adjusted to include a total of 71 locations to be modified. To mitigate delays from the load test performed under CCO 387, the work scope for this change order (CCO 379) will be performed 7 days per week instead of the scheduled 6 days per week which will cost an additional \$247,199.

The total cost of this change order is \$1,947,199.00 lump sum, which can be financed from the contingency fund. A detailed cost analysis is on file.

No time adjustment is warranted as this change order does not affect the controlling operation.

This change order has concurrence from William Casey (Supervising TE), Tony Anziano (Program Manager), Rich Foley (HQ Oversight), Lina Ellis (Maintenance), and Wenyi Long (Bridge Design).

This change order is pending approval from the Toll Bridge Project Oversight Committee (TBPOC).

CONCURRED BY:					ESTIMATE OF COST		
Construction Engineer:	William Casey, Sup TE	Date	6/30/14		THIS REQUEST	TOTAL TO DATE	
Bridge Engineer:	CT Oversight, Ade Akinsanya, P.E.	Date	8/18/14	ITEMS	\$0.00	\$0.00	
Bridge Engineer.	Of Oversight, Ade Attribution, 1.2.	Date	U/ TU/ TT	FORCE ACCOUNT	\$0.00	\$0.00	
Project Engineer:		Date		AGREED PRICE	\$1,947,199.00	\$1,947,199.00	
Project Manager:	TB Program Manager, Tony Anzian	Date	8/19/14	ADJUSTMENT	\$0.00	\$0.00	
FHWA Rep.:		Date		TOTAL	\$1,947,199.00	\$1,947,199.00	
		<b>5</b>			FEDERAL PARTICIPATION	ON	
Environmental:		Date		☐ PARTICIPATING	PARTICIPATING II	N PART NONE	
Other (specify):	HQ, Rich Foley	Date	7/7/14			Miscas amateura 15 16 150 facts 4 650 facts 16	
		52 N		NON-PARTICIPATING	G (MAINTENANCE)	NON-PARTICIPATING	
Other (specify):	Struct. Maint, Lina Ellis	Date	8/20/14	FEDERAL SEGREGATIO	N (if more than one Fur	nding Source or P.I.P. type)	
District Prior Approval By:			i	☐CCO FUNDED PER CONTRACT ☐ CCO FUNDED AS FOL			
HQ (Issue Approve) By:				FEDERAL FUNDING S	PERCENT		
Resident Engineer's Signature:				Reservation and the second sec			
		2007		3 <u></u> 3	Walter State of the Control of the C		
1 100	8	-17	-14			3	